Explaining the Value of Water

BY NEIL S. GRIGG

If water is Earth's most valuable resource and essential to life, why are water utilities underfunded? The answers seem obvious. Utility customers turn on the tap and expect a reliable supply of clean water but don't expect to pay much for it.

People will pay a high price for bottled water but not for tap water; they don't think water or wastewater services should cost a lot. They embrace new technologies and are willing to pay for phone and entertainment services, but they don't understand the cost of providing water services. They don't see a connection between their water bills and the environment. Customers resist rate increases, the cost of water remains low, and problems continue to mount.

These problems, well known by water utilities, are summarized in The Value of Water, a 2011 white paper by American Water:

- Customers in North America are unaware of the true cost of water.
- They pay less for water than do residents of most developed nations.
- Water bills are lower than gas, telephone, and electricity bills.
- Underpricing results largely from a perception that water is free and a fundamental right.
- Infrastructure to treat and deliver water is far from free.
- A lack of investment has left the water infrastructure in serious disrepair.
- The cost to bring water and wastewater systems up to date is about $1 trillion over 20 years.
- Because most funding comes from customers, a major shift in water pricing is needed.

UTILITY INFRASTRUCTURE

Year-to-year deferral of utility infrastructure renewal is the major financial challenge facing water utilities. This is evident in the fact of buried water assets being renewed about once every 150–200 years, despite their shorter lifetimes. The total replacement value of US water and wastewater assets is about $1.5 trillion. Assuming an average 100-year lifetime and a 150-year replacement cycle, the annual increase in deferred investment is about $5 billion. This problem can be remedied by increasing the price of water services to raise needed capital, but it will require the public to acknowledge the value of water services and the need to pay for them.

Although the white paper reported encouraging signs about the public's willingness to pay for water, it will be difficult to make major changes quickly. For example, most water rate increases occur only through local political processes or public utility commission approval. Neither of these approval scenarios leads to large, sustained increases in the price of water. Increases must be incremental and must be supported by increased public trust.

A starting point to gain approval for rate increases is for utilities, elected and appointed officials, and the public to understand the full value of water used for various purposes. This important work has been a key issue for AWWA and is implicit in its strategic plan, which states that the association "will lead the water community by identifying trends and issues, advocating for public policies, and engaging in other actions that promote safe water and reflect sound science."

NATURAL RESOURCE vs. COMMODITY

As explained by Robert S. Raucher in The Value of Water: What It Means, Why It's Important, and How Water Utility Managers Can Use It, an article that appeared in *Journal – American Water Works Association*—water is valued in two ways. First, it's a life-sustaining natural resource. This is the public-good attribute of water; it's necessary for aquatic life, wildlife, and people, as well as for public purposes, such as recreation and aesthetics. Because utilities divert water and return wastewater, they must be responsible for paying for some of these values. This aspect can be difficult for the public to appreciate.

The second aspect of water value is the reliable delivery of safe water by utilities to their communities and customers. This is water's commodity value as a resource people and businesses use and pay for, just as they pay for other commodities, such as electricity or natural gas. A commodity is a good that can be bought and sold without much distinction between one product or another. This view of water's value is fairly well understood among the public, yet the public doesn't seem to understand the cost of infrastructure and operations to sustain high-quality service.

Water can also be put to many other uses, such as hydroelectricity generation, irrigation, and environmental nourishment. Utilities usually don't pay for these uses, but they're sometimes involved.

VALUE

It's one thing to know the value of water and another to explain it to customers. A good tool to communicate the value of water was provided by a Water Research Foundation study, *Communicating the Value of Water: An Introductory Guide for Water Utilities*, which pointed out the importance of gaining community support to obtain needed funding. The groups having the most influence in achieving community support and acquiring funding are customers, special-interest groups, elected and appointed officials, and utility leaders and employees.

The study developed a communication program model that includes strategic planning, gap analysis for communications and behavior, branding, and national communication efforts. Brand-building campaigns can be a starting

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Neil S. Grigg is a professor of civil engineering and former director of the Colorado Water Resources Research Institute at Colorado State University (www.colostate.edu), Fort Collins, Colo. He's also the author of *Total Water Management* (catalog No. 20516), which is available from the AWWA Bookstore (www.awwa.org/store).

point, such as AWWA's Only Tap Water Delivers and the Water Environment Federation's Water Is Life and Infrastructure Makes It Happen. Branding requires clear and consistent messages that might stress service reliability, water quality, customer service, environmental stewardship, financial performance, and communication.

Because public trust is so important and reflects utility performance, it's important to avoid a negative image and to recruit necessary citizen involvement. Incidentally, involvement in utility affairs differs from involvement in government in general. Sometimes interest groups who want a government program funded say, "Don't waste a good crisis." With water services, you don't want a crisis; you want the public's confidence. However, if the public thinks a utility is doing a good job, why does the utility need more funding?

In terms of public expectations, the research showed customers expect tap water to be safe to drink, water service to be reliable, water bills to be accurate, and help when they have a problem. Utility leaders think success requires the community's belief that the utility manages resources efficiently, bills are accurate and descriptive, the utility is in touch with customers, and it stands for high-quality water and reliable service.

Effective communication with elected and appointed officials about the value of water is essential to obtain financial resources. Elected and appointed officials think utility communications should contain no surprises about funding requests, projects should demonstrate officials' accomplishments, and peer-city comparisons should be offered. It is also important that utilities perform thorough analysis to back up funding requests and that messages are positive about quality, reliability, price, conservation, and source water protection.

The media can help utilities convey their messages. However, media outlets often seek sensational news and may ignore noncrisis information about water. Utilities should build strong relationships with local media to get positive news coverage. In addition, a good website is essential, especially one that's devoted to providing source information for writers.

THE CHALLENGE

It's no secret that water services have high value. The challenge is to effectively explain that value and to build public trust that leads to adequate funding. The first step is for utility employees and policymakers to thoroughly understand this value and craft accurate, clear messages to the community. When such messages are delivered consistently and accompanied by high levels of service quality, public trust will build and finances should improve.

RESOURCES

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